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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,322	08/02/2001	Keunsuk P. Chang	1151-01	5050

7590

03/03/2003

IP Department  
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EXAMINER

JACKSON, MONIQUE R

ART UNIT

PAPER NUMBER

1773

DATE MAILED: 03/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application N .

09/921,322

Applicant(s)

CHANG ET AL.

Examiner

Monique R Jackson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2,3. 6) ☐ Other:

## DETAILED ACTION

### *Claim Objections*

1. Claim 24 is objected to because of the following informalities: at line 10, “c) laminate film” should be “said laminate film” or “the laminate film” or similar phrase. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1, 3, 24 and 26 recite the limitation “biaxially oriented at about 5.5 –10 stretch ratio in the machine direction and about 7.0-12.0 stretch ratio in the transverse direction **which imparts superior machine direction tensile properties such as** Young’s modulus of about 350,000 to about 400,000 psi or greater, elongation of about 120% or less, and tensile strength of about 27,000 to about 30,000 psi or greater” however the phrase “such as” renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d). Further, it is unclear whether the limitation “superior machine direction tensile properties” is meant to be part of the claimed invention or whether it is just a stated result of the biaxial orientation. Hence, one having ordinary skill in the art would not be reasonably apprised of the scope of the claimed invention and could not interpret the metes and bounds of the claim so as to understand how to avoid infringement.

4. Claims 21 and 23, 25, and 29-33 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 21 recites the limitation "laminate film of claim 19, wherein the additive comprises..." in line 1. There is insufficient antecedent basis for this limitation in the claim. Further, it is noted that Claim 25 recites the limitation "laminate film of claim 23, further comprising: a) A heat sealable layer or winding layer comprising at least an antiblock component" in lines 1-2 however given that Claim 25 depends on Claim 23, which depends on Claim 21, which depends on Claim 19, which depends on Claim 15 which depends on Claim 3, which includes already includes a second polyolefin polymer layer comprising an antiblock component, it is unclear whether the heat sealable layer and the second polyolefin polymer layer are the same layers or how an additional heat sealable layer is to be incorporated into the laminate given that the specification does not provide a description of two separate layers comprising an antiblock component.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

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6. Claims 1-21 and 23-42 and 44 are rejected under 35 U.S.C. 102(a) or 102(e) as being anticipated by Nagai et al (USPN 6,190,760.) Nagai et al teach a metallized biaxially oriented polypropylene film comprising an isotactic polypropylene base layer; a surface layer comprising polypropylene and ethylene propylene random copolymer with 4.8wt% ethylene, on one side of the base layer having a thickness of 0.25 $\mu$ m or more and not more than one half of the thickness of the base layer; and a third layer that may be heat sealable on the opposite side of the base layer from the surface layer, comprising ethylene propylene copolymer, or ethylene propylene butene terpolymer or HDPE or mixtures thereof; and an aluminum metal layer deposited on the surface layer to an optical density of 1.6 or more, preferably 1.8 or more, which would inherently result in a thickness with the instantly claimed range; wherein for stronger adhesiveness to the metal layer, petroleum or terpene resin is incorporated into the surface layer in an amount up to 20wt parts per 100 wt parts of the surface layer and may further comprise a small amount of crosslinked silicone or PMMA particles; wherein the surface layer is further treated by corona discharge treatment; wherein the film is coextruded and then biaxially stretched by a ratio of 4 to 7 in the machine direction and 7 to 11 in the tranverse direction; wherein the third or heat sealable layer may comprise organic crosslinked particles such as crosslinked silicone particles as an antiblocking agent and may be further corona discharge treated; and wherein Nagai et al specifically teach examples that read upon the instantly claimed invention including stretching ratios, layer thickness, additive amounts and ethylene content in the heat seal layer (Abstract; Col. 4-10; Examples.)

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 22 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagai et al (USPN 6,190,760) in view of Isaka et al (USPN 4,343,852) or Migliorini et al (USPN 5,194,318) or Murschall et al (USPN 5,366,796.) The teachings of Nagai et al are discussed above. Nagai et al do not teach the incorporate of a slip agent such as a polyethylene wax as instantly claimed into the surface layer. However, Nagai et al do teach that organic or inorganic particles can be added to give slipperiness to improve working convenience and windability. Further, it is well known in the art that lubricants and/or antiblocking agents are conventional additives in the art as taught by Isaka et al, or Migliorini et al or Murschall et al, wherein Isaka et al teach that incorporation of a lubricating agent such as polyethylene waxes and/or an antiblocking agent in an amount of 0.1 to 3 parts by weight is effective in improving the lubricity and antiblocking properties of the surface layer. Migliorini et al also teach the incorporation of a minor about of about 10wt% of microcrystalline wax in a polyolefin skin layer to be metallized; and Murschall et al teach that the outer layers of a polyolefin film can further contain known additives such as antistatics, antiblocking agents and lubricants such as waxes in a range 0.1 to 3wt%, to improve certain properties of the polyolefin film. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to incorporate a conventional lubricant such as polyethylene waxes into the surface layer taught by Nagai et al

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utilizing routine experimentation to determine the optimum amount to provide the desired slipping and/or antiblocking properties for a particular end use.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R Jackson whose telephone number is 703-308-0428. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul J Thibodeau can be reached on 703-308-2367. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Monique R. Jackson  
Patent Examiner  
Technology Center 1700  
February 23, 2003